AZM201Z-SK-T-1P2PW



- **Manual release**
- **Power to unlock**
- **Intelligent diagnosis**
- **Thermoplastic enclosure**
- **Guard locking monitored**
- **Self-monitoring series-wiring**
- **3 LEDs to show operating conditions**
- **Max. length of the sensor chain 200 m**
- **Suitable for hinged and sliding guards**
- **RFID-technology for needs-based protection against tampering**
- **Sensor technology permits an offset between actuator and interlock of ± 5 mm vertically and ± 3 mm horizontally**

Data

Ordering data	
Product type description	AZM201Z-SK-T-1P2PW
Article number (order number)	103013908
EAN (European Article Number)	4030661493367
eCl@ss number, Version 9.0	27-27-26-03
Certifications	
Certificates	TÜV cULus EAC
General data	
Product name	AZM 201
Standards	IEC 60947-5-1 ISO 13849-1 IEC 61508 IEC 60947-5-3 ISO 14119 IEC 62061
general information	Universal coding Low

Active principle	RFID
Enclosure material	Glass-fibre, reinforced thermoplastic
Gross weight	580 g
Time to readiness, maximum	4,000 ms
Duration of risk, maximum	200 ms
General data - Features	
Power to unlock	Yes
Guard locking monitored	Yes
Manual release	Yes
Short circuit detection	Yes
Short-circuit recognition	Yes
Series-wiring	Yes
Safety functions	Yes
Integral System Diagnostics, status	Yes
Number of safety contacts	2
Safety appraisal	
Standards	ISO 13849-1 IEC 62061 IEC 61508
Safety appraisal - Interlocking	
Performance Level	e
Control category	4
PFH-value	1.90×10^{-9} /h
PFD value	1.60×10^{-4}
Safety Integrity Level (SIL)	3
Mission Time	20 Year(s)
Safety appraisal - Guard locking	
Performance Level	d
Control category	2
PFH-value	1.00×10^{-8} /h
PFD value	8.90×10^{-4}
Safety Integrity Level (SIL)	2
Mission Time	20 Year(s)
Mechanical data	
Mechanical life, minimum	1,000,000 Operations
Clamping force in accordance with ISO14119 F_{zh}	2,000 N

Clamping force, maximum F max	2,600 N
Latching force	30 N
Actuating speed, maximum	0.2 m/s

Mechanical data - Connection technique

Terminal Connector	Screw connection
Cable section, minimum	0.25 mm²
Cable section, maximum	1.5 mm²
Note (Cable section)	All indications about the cable section are including the conductor ferrules.
Wire cross-section, minimum	23 AWG
Wire cross-section, maximum	15 AWG

Mechanical data - Dimensions

Height of sensor	220 mm
Length of sensor	50 mm
Width of sensor	40 mm

Ambient conditions

Protection class	IP66 to IEC 60529 IP67 to IEC 60529
Ambient temperature, minimum	-25 °C
Ambient temperature, maximum	+60 °C
Storage and transport temperature, minimum	-25 °C
Storage and transport temperature, maximum	+85 °C
Relative humidity, minimum	30 %
Relative humidity, maximum	95 %
Note (Relative humidity)	non-condensing
Resistance to vibrations to EN 60068-2-6	10 ... 150 Hz, amplitude 0.35 mm
Restistance to shock	30 g / 11 ms
	III

Ambient conditions - Insulation value

Rated impulse withstand voltage	0.8 kV
	III
Degree of pollution to VDE 0100	3

Electrical data	
Operating voltage, minimum	20.4 VDC
Operating voltage, maximum	26.4 VDC
No-load current	600 mA
Operating current	1,200 mA
Reaction time of actuator, maximum	100 ms
Reaction time of input, maximum	0.5 ms
Switching frequency, approx.	1 Hz
Electrical data - Solenoid control	
Switching thresholds of magnet inputs	-3 V ... 5 V (Low) 15 V ... 30 V (High)
	C0
	C1 C2 C3
Electrical data - Fail-safe digital inputs	
Switching thresholds of fail-safe inputs	−3 V ... 5 V (Low) 15 V ... 30 V (High)
	C1
	C1 C2 C3
Electrical data - Fail-safe digital outputs	
Rated operating current (safety outputs)	250 mA
	4 V
Current leakage	0.5 mA
	C2
	C1 C2
Electrical data - Diagnostic output	
Operating current (diagnostic output)	50 mA
	4 V
Status indication	

Note (LED switching conditions display)	Operating condition: LED green Error / functional defect: LED red Supply voltage UB: LED green
Scope of delivery	
Included in delivery	Actuators must be ordered separately. Triangular key for AZM 201
Accessory	
Recommendation (actuator)	AZ/AZM201-B1 AZ/AZM201-B30
Notes	
Note (General)	As long as the actuating unit remains inserted in the solenoid interlock, the unlocked safety guard can be relocked. In this case, the safety outputs are re-enabled, so that the safety guard must not be opened.
Ordering code	

Product type description:

AZM201(1)-(2)-(3)-T-(4)-(5)

(1)

Z	Solenoid interlock monitored
B	Actuator monitored

(2)

without	Standard coding
I1	Individual coding
I2	Individual coding, re-teaching enabled

(3)

SK	Screw terminals
CC	Cage clamps
ST	Connector plug M23, 12-pole

(4)

1P2PW	1 diagnostic output, p-type and >2 safety outputs, p-type > (combined diagnostic signal: guard system closed and interlock locked)
SD2P	serial diagnostic output and 2 p-type safety outputs

(5)

without	Power to unlock
A	Power to lock

Documents

Operating instructions and Declaration of conformity

(543,3 kB, 23.04.2020, F)

TÜV certification

(587,7 kB, 06.12.2019)

UL Certificate

(378,9 kB, 01.08.2019)

EAC certification

Brochure

(5,7 MB, 07.11.2019, Revision 09)

SISTEMA-VDMA library

(134,9 kB, 19.06.2019)

Pictures

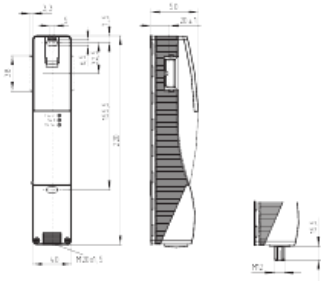
Product picture (catalogue individual photo)



ID: kazm2f48

| 335,0 kB | .png | 74.083 x 340.783 mm - 210 x 966 Pixel - 72 dpi
| 477,3 kB | .jpg | 27.093 x 124.629 mm - 320 x 1472 Pixel - 300 dpi
| 735,6 kB | .jpg | 135.819 x 625.122 mm - 385 x 1772 Pixel - 72 dpi

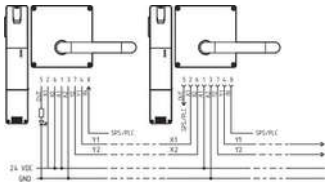
Dimensional drawing basic component



ID: 1azm2g12

| 5,3 kB | .png | 74.083 x 64.911 mm - 210 x 184 Pixel - 72 dpi
| 21,1 kB | .jpg | 169.686 x 148.519 mm - 481 x 421 Pixel - 72 dpi
| 146,3 kB | .jpg | 352.778 x 308.681 mm - 1000 x 875 Pixel - 72 dpi
| 31,8 kB | .jpg | 112.889 x 98.778 mm - 320 x 280 Pixel - 72 dpi

Wiring example



ID: kazm2l26

| 105,6 kB | .jpg | 352.778 x 192.969 mm - 1000 x 547 Pixel - 72 dpi
| 50,3 kB | .cdr |

System components

Actuator



103013499 AZ/AZM201-B30-RTAG1P1-SZ

- Actuator for hinged guards
- Easy and intuitive operation
- No risk of injury from protruding actuator
- No supplementary door handles required
- Does not protrude into the door opening
- for right hinged doors
- with handle and Emergency exit handle
- with integrated lockout tag



103013497 AZ/AZM201-B30-RTAG1P1

- Actuator for hinged guards
- Easy and intuitive operation
- No risk of injury from protruding actuator
- No supplementary door handles required
- Does not protrude into the door opening
- for right hinged doors
- with handle and Emergency exit handle



103013502 AZ/AZM201-B30-RTAG1

- Actuator for hinged guards
- Easy and intuitive operation
- No risk of injury from protruding actuator
- No supplementary door handles required
- Does not protrude into the door opening
- for right hinged doors
- with handle



103013500 AZ/AZM201-B30-LTAG1P1-SZ

- Actuator for hinged guards
- Easy and intuitive operation
- No risk of injury from protruding actuator
- No supplementary door handles required
- Does not protrude into the door opening
- for left hinged doors
- with handle and Emergency exit handle
- with integrated lockout tag



103013498 AZ/AZM201-B30-LTAG1P1

- Actuator for hinged guards
- Easy and intuitive operation
- No risk of injury from protruding actuator
- No supplementary door handles required
- Does not protrude into the door opening
- for left hinged doors
- with handle and Emergency exit handle



103013501 AZ/AZM201-B30-LTAG1

- Actuator for hinged guards
- Easy and intuitive operation
- No risk of injury from protruding actuator
- No supplementary door handles required
- Does not protrude into the door opening
- for left hinged doors
- with handle



103013495 AZ/AZM201-B1-RTP0

- Actuators with return spring
- Actuator for sliding guards
- Tolerates up to max. 5 mm overtravel
- for right hinged doors
- with Emergency exit



103013494 AZ/AZM201-B1-RT

- Actuators with return spring
- Actuator for sliding guards
- Tolerates up to max. 5 mm overtravel
- for right hinged doors



103013496 AZ/AZM201-B1-LTP0

- Actuators with return spring
- Actuator for sliding guards
- Tolerates up to max. 5 mm overtravel
- for left hinged doors
- with Emergency exit



103013493 AZ/AZM201-B1-LT

- Actuators with return spring
- Actuator for sliding guards
- Tolerates up to max. 5 mm overtravel
- for left hinged doors



103015820 AZ/AZM201-B30-LTAG1P30

- for left hinged doors
- with handle



103015823 AZ/AZM201-B30-RTAG1P30

- for right hinged doors
- with handle



103015821 AZ/AZM201-B30-LTAG1P31

- for left hinged doors
- with handle and Emergency exit handle



103015824 AZ/AZM201-B30-RTAG1P31

- for right hinged doors
- with handle and Emergency exit handle



103015822 AZ/AZM201-B30-LTAG1P31-SZ

- for left hinged doors
- with handle and Emergency exit handle
- with integrated lockout tag



103015825 AZ/AZM201-B30-RTAG1P31-SZ

- for right hinged doors
- with handle and Emergency exit handle
- with integrated lockout tag



103026321 AZ/AZM201-B30-RTAG1P20-SZ



103026322 AZ/AZM201-B30-LTAG1P20-SZ

Accessories



101194438 SZ 200

- Suitable for mounting inside and outside of the hazardous area
- To prevent inadvertent closing, e.g. during maintenance
- For complex plant
- Prevents actuation of the switch
- Lockout tag with 5 circular holes



101196397 SZ 200-1

- Suitable for mounting inside and outside of the hazardous area
- To prevent inadvertent closing, e.g. during maintenance
- For complex plant
- Prevents actuation of the switch
- Lockout tag with 6 circular holes

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The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.
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